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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/871,268	05/31/2001	Man Tai Vincent Lam	2030.42	2199

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EXAMINER	
MEI, XU	
ART UNIT	PAPER NUMBER
2615	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/871,268	VINCENT LAM, MAN TAI	
	Examiner	Art Unit	
	Xu Mei	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 November 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4,7,9,10,12-15,17,19,20,32,34,36 and 37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *12-15,17,19,20,32,34,36 and 37* is/are allowed.

6)☒ Claim(s) *1,2,4,7,9,10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948).
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is responsive to the applicant's amendment dated 11/16/2006.

2. The indicated allowability of claims 1-2, 4, 9-10 is withdrawn in view of the newly discovered reference(s) to Kintis et al (US-6,535,720, hereafter, Kintis). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 2, 4, 7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kintis.

Regarding claim 2, Kintis discloses a dual carrier wireless transmitter apparatus, comprising: modulators (25), oscillators (27), that indicates modulating a first channel with a first carrier frequency; a second channel with a second carrier frequency; the signals are summed together by a broadly claimed high isolation combiner (i.e., summer 30) and produced a single output that are output through an antenna (inherently

included for wireless communication). The different amplifiers (28) used to amplify the modulated carrier signals for each individual channel prior inputted to the high isolation combiner is also shown as in Fig. 1. What's not shown by Kintis is the oscillators are voltage controlled oscillators. However, voltage controlled oscillator (VCO) is old and well known in the art for used in signals modulation in a transmitter. The Examiner take office notice that it would have been obvious to one of the ordinary skill in the art at the time the invention was made to used the old and well known VCOs for signals modulation in the transmitter of Kintis.

Regarding claim 4, the use of dielectric resonator oscillator was also old and well known in the art. The Examiner take office notice that it would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Kintis by implementing a dielectric resonator oscillator for the purpose of providing optimal stability.

Regarding claim 9, see col. 3, lines 8-13 of Kintis.

Regarding claim 10, the analog input signals as disclosed by Kintis are being between 50Hz to 20kHz.

Regarding claim 7, Kintis discloses the wireless transmitter apparatus, and method thereof, as discussed in claim 2 above. What's not taught by Kintis is the first oscillator having a first oscillator frequency band of 150 KHz deviates from the second oscillator. However, it is old and well known in the art that two different oscillators in one wireless transmitter is being oscillating at different frequency ranges in order to

prevent overlapping of signals being transmitted. Therefore, the Examiner take office notice that it is obvious to one of ordinary skill in the art to designs the different oscillators of Kintis with different frequency base band/range, by a optimal or desired frequency different (150 KHz, for example), in order to prevent overlapping of signals being transmitted.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kintis in view of Kroeger et al (US-6,178,317, hereafter, Kroeger).

Regarding claim 1, Kintis discloses the wireless transmitter apparatus, and method thereof, as discussed in claim 2 above. What's not shown by Kintis is the transmitter apparatus and method thereof including a receiver system, and regenerating the first channel and the second channel of signals in the system by separating one from the other. However, wireless communication system having both transmitter and receiver is old and well known in the art. Kroeger discloses a wireless communication system that is including the old and well known transmitter and receiver (see Fig. 1) that is demodulating the received signals and regenerated them back to their original form for user. It would have been obvious to one of ordinary skill in the art to modify the transmitter apparatus of Kintis with an old and well known wireless receiver, as shown by Kroeger, in order to demodulating the received signals and regenerated them back to their original form for user.

Allowable Subject Matter

5. Claims 12-15, 17, 19-20, 32, 34, 36-37 are allowed.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Roder is made of record here as pertinent art to the claimed invention. Roder discloses a FM system that having multiple oscillators.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xu Mei whose telephone number is 571-272-7523. The examiner can normally be reached on maxi flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Xu Mei
Primary Examiner
Art Unit 2615
02/02/2007